We've finished the April 11, 2017 Bulletin 120 (B120) forecast update. The forecasts include observed conditions through the morning of April 11, 2017.

The forecasts are posted at:

B120: http://cdec.water.ca.gov/cgi-progs/iodir?s=b120up

Forecast Summary:

The forecasts increased in all basins due to the storms of last week. The projected median April-July (AJ) runoff in the major Sierra river basins range from 144 percent of average for the Sacramento River at Bend Bridge to 247 percent on the Kern River. The April 11 forecast shows increases of 22, 9, and 9 percent in the Sacramento, San Joaquin, and Tulare Lake regions compared to the April 1 forecast. The Feather forecast increased by over 30 percent due to the particularly heavy rain and snow that fell over the basin.

Runoff:

April-to-date flows are near or above 180 percent of average for all major Sierra rivers, except for the Mokelumne River, which is flowing at 156 percent of average. The Feather River is flowing at 225 percent of average, while the Kern River is flowing at 267 percent of average. Through the first 12 days of April, most basins are near or have already exceeded their entire 2015 April-July volume except for the Sacramento, Tuolumne, and Kings rivers.

Precipitation:

Precipitation for the 2016-2017 water year has accumulated at the rates of average shown in the table below.

Region/Index	WY-to-date precipitation (%) through April 13, 2017	Month-to-date precipitation (% of month total) through April 13, 2017
Northern Sierra 8-Station Index	**207 (89.7 inches)**	**161 (6.3 inches)**
San Joaquin 5-Station Index	**194 (68.2 inches)**	**88 (3.2 inches)**
Tulare Basin 6-Station Index	**177 (45.0 inches)**	**69 (1.8 inches)**

The Northern Sierra 8-Station Index has reached an all-time record with 89.7 inches, eclipsing the 1982-83 water year total of 88.5 inches.

Snowpack:

The snowpack as of the morning of April 13, 2017 stands at the following (based on snow sensors):

Region	Snow Water Equivalent (inches)	% of Average (Apr 1)	% of Average (April 13)
Northern	**43.2**	**154**	**166**
Central	**52.5**	**180**	**186**
Southern	**43.1**	**164**	**170**
Statewide	**47.2**	**168**	**176**

The storms of last week have pushed the snowpack to their season highs in the Northern and Central Regions. The statewide snowpack is 0.1 inch less than it was on March 10, this year's current date of highest snow water content.

Weather and Climate Outlooks:

The latest forecast for the next six days indicates a few more storms will impact the mountainous regions during that time. Up to 0.8 inches of precipitation is expected from the Sacramento River down through the San Joaquin river basins today. A break in precipitation of up to two days is forecast before the next systems come in starting on Sunday, which are forecast to be a bit heavier in the northern and central Sierra than in the southern Sierra. The current freezing levels which are 4,000 to 5,000 feet over the northern Sierra and 5,500 to 7,000 feet over the southern range are expected to increase by about 4,000 feet over the next three days and then decrease by about 2,000 feet by the end of the 6-day period.

The NWS Climate Prediction Center (CPC) one-month outlook for April, issued March 31, indicates increased chances of above normal precipitation for the northwestern corner of the state and equal chances of above or below normal precipitation elsewhere. The same outlook predicts equal chances of above or below normal temperatures for all areas except for the southern third of the state where above normal temperatures are expected.

The CPC three-month (April-May-June) outlook, issued March 16, indicates equal chances of above or below normal precipitation for all of the state. The same outlook predicts equal chances of above or below normal temperatures for the state except for the far southeastern area and the Colorado River basin where above normal temperatures are expected.

ENSO-neutral conditions are present. Equatorial sea surface temperatures (SSTs) are near average across the central and east-central Pacific. They are above average in the eastern Pacific Ocean. ENSO-neutral conditions are favored to continue through at least the Northern Hemisphere spring 2017, with increasing chances for El Niño development into the fall.

Next Update:

A Bulletin 120 for conditions as of April 18 will be available Thursday, April 20. If you have any questions regarding this forecast, please contact a member of the Snow Surveys staff.